





PAGER Version 13

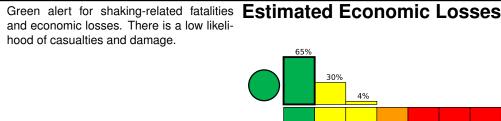
Created: 2 weeks, 1 day after earthquake

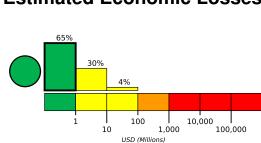
M 5.0, 52km W of Petrolia, CA

Origin Time: 2021-12-20 20:13:42 UTC (Mon 12:13:42 local) Location: 40.3329° N 124.6246° W Depth: 22.4 km

Estimated Fatalities 10,000 1,000

and economic losses. There is a low likeli-





Estimated Population Exposed to Earthquake Shaking

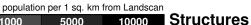
ESTIMATED POPULATION EXPOSURE (k=x1000)		227k*	480k	0	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	11-111	IV	V	VI	VII	VIII	IX	X+
PERCEIVE	SHAKING	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

^{*}Estimated exposure only includes population within the map area.

Population Exposure

40.8°N

39.6°N

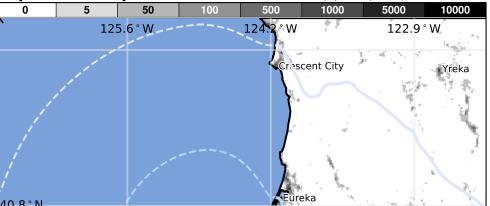


Hayfork

Covelo

Redway

ort Bragg



Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

Historical Earthquakes

Date	Dist.	Mag.	Max	Shaking
(UTC)	(km)		MMI(#)	Deaths
1993-09-21	309	6.0	VI(47k)	1
1980-11-08	90	7.3	IX(16k)	0
1980-01-24	384	5.8	VII(35k)	1

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
Ш	Ferndale	1k
Ш	Rio Dell	3k
Ш	Fortuna	12k
Ш	Redway	1k
Ш	Bayview	3k
Ш	Pine Hills	3k
Ш	Eureka	27k
II	Arcata	17k
II	Bayside	17k
II	Redding	90k
II	Windsor	27k

bold cities appear on map.

(k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.